Feedback summary for 3 i2c workshops at Rajasthan in June and August

This is a summary of 3 i2c workshops at Jaipur and Sirohi ending on 10th, 19th June and 13th August respectively. Only english responses were collected for the first, and only Hindi in the last two. This summary is a collation of all three response sets. Workshop-level summary and analyses of these and others will be posted next. This summary comes from 3 data sources:

- Responses to teacher's workshop feedback as collated by Google Forms
- Observations from teacher's qualitative responses in feedback
- Observation Checklists, as reported by observers
- 1. Following is a summary of soft-analysis of data collected from Google forms. Details <u>here</u>, a work still in progress.

Confident to	% Confidence Levels
Articulate the key objectives and activities of CLIX) to other teachers and school administrators	68 22
Log in and log out from the i2C course platform	72 21
	73.31
Explain basic Internet safety to my students	63.35
List the features of the platform used for i2C	64.83
Identify the key principles of the i2c course	63.56
Explain the purpose of the Indic Typing activities in i2C	66.53
Conduct the Indic typing activities with my students	63.14
Articulate the purpose of spreadsheets	65.89
Describe skills students will gain from the spreadsheet activity	63.14
Conduct the i2C spreadsheet activities with my students	62.5
Name at least one topic in a subject where spreadsheets can be used by my students	62.71
Plan my own activity that uses a spreadsheet to teach a subject topic to my students	59.75
Identify digital literacy skills my students should develop by completing i2C activities (uploading, notebook, etc.)	61.44
Articulate the purpose and design principles of Inkscape	56.36
Implement the Inkscape Module with my students	57.42
Plan an activity that uses Inkscape to teach a subject topic to my students	58.69
Identify competencies my students should develop by completing Inkscape activities	59.53
Articulate the purpose for using Geogebra	59.32
Conduct Geogebra activities with my students	58.9
Plan an activity that uses GeoGebra to teach a subject topic to my students	56.57
Identify ways that a Community of Practice (CoP) can be helpful to my teaching practice	61.44

Experience Break-ups	
<1 yr	6
1-3 yrs	33
4-6 yrs	21
7-10 yrs	9
>10 yrs	48

Subject Teacher Break-	ups
English	37
Maths	45
Physics	16
Chemistry	16
Biology	27
Others	6

Tool type	% Confidence Levels
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i2c general	65.785
Indic typing	64.835
Spreadsheets	62.798
Inkscape	58
Geogebra	58.26333333333
Confident about	% Confidence Levels
Articulate purpose	63.264
Conduct with students	60.225
Plan own activity	58.3366666667
Identify student skills	61.37

Method for soft-analysis:

 English (57) and Hindi responses (61) collated from google forms.
Average calculated for each qn weighted by teacher frequencies at each confidence level.

3. Avg levels calculated for each tool, and for each 'action' (left), a teacher can do in relation to it.

- No of teachers: 118; Hindi Responses: 61; English: 57;

- 71% agree or strongly agree that they are overall confident to implement i2c.

Confident to imolement	overall i2c?
Strongly Disagree	1
Disagree	3
Not Sure	27
Agree	74
Strongly Agree	10

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1. One of the workshop had teachers repeating the course. Contexts also different. So, each workshop can be analysed separately.

- 2. Check if skew is significant. Look for medians and variances.
- 3. Subject-wise teacher confidence levels.
- 4. An exploratory factor analyses.

Emergent points, feeding back (from observations reported below)

- Introducing CLIx in a clearer way. Using videos better to get across nuances of the program.
- Making explicit some, if not too many, connections with state textbook to keep teachers confident.
- Share CLIx flow and kind of support teachers will get (latter in details), to make implementation seem very realistic to teachers.

- Orienting FSPs with tools, design rationale and some exemplar subject connections for them to have conviction before teachers.

- Scheduling more practice on tools for FSPs, TEs and teachers.

2. Observations from qualitative comments

(the bluntest part; hope lies in the way one respond to these.)

(Numbers in brackets are temporary teacher codes which can be traced back to particular teacher; We are working on a systematic teacher coding for all data purposes.)

<u>2.1. Liked</u>

- Working on individual computer (78), Sending/receiving emails, making graphs, geogebra;

- 1. Working on individual computers. Emailing. Enhanced computer awareness.
- 2. Useful to both student and teacher.
- 3. 'Teaching process' of facilitators. (3, 6, 7, 11, 47, 50)
- 4. 'Learning by doing' with computer.
- 5. WOrkshop helped us in teaching subjects.
- 6. Making subject approachable and interesting for students.
- 7. CLIX team including FSPs are talented, hard working and have good behaviour.
- 8. CLIx is an 'interest-creating' program, sure to help students.
- 9. Now we can use digital tools in making teaching interesting. (56, 57)

2.2. Did not like

- Workshop interesting but duration too short to gain sufficient knowledge. (9, 10)
- Make us familiar with use of digital tools in teaching particular subjects.
- Need more time, practice;
- Indic typing can be boring to some.
- Computer knowledge is essential but we can assess the project after subjects modules and its applications (12)
- This is not for middle school students (21)
- Session was too fast. (19)
- We are repeating same things which we have done in earlier workshops. (22)
- Experts are also not able to explain properly. (33)
- Server service was very poor. (35)
- Improve method of practice (49)
- Distance of venue was long, problems with internet, server and AC.
- Presentation/teaching is not effective. (76)

2.3. Feedback

- CLIx team should visit schools during implementation.
- Training period should be more (10 days);
- More practice for each tool.
- Make it more practical and usable.
- Include 'power point' presentations as well. (69)
- Some teachers were not active, and were taking things for granted.
- Do not conduct in summer. (1)
- Connect with subjects. (29, 30)
- Long practice time.
- Add CLIx project in syllabus (!2)
- Arrange i2c training according to subject areas. (13)
- CLIx program not so important for our subject teaching. (12)
- Start these activities from Class 6; conduct regular workshops (21)
- Start new things next time; More practice needed with Inkscape and Geogebra.
- A technical person should explain from begining to end. (33)
- More guidance is required to implement with students properly. (35)
- Keep training venue close to where we stay. (40)
- Challenges before teachers in implementing CLIx: (46)

Classroom strength, Irregularity of the students, Course completion pressure, Infrastructure , Students' basic concepts are not clear

- Maintain continuity of program. (49, 50)
- Ensure we take down notes. (52)

- It is necessary to develop softwares. (76)

3. Summary of observation checklists

Almost all sessions were liked by one or the other groups of participants. Most sessions fared a 4 on participation, which is considered adequate.

A few highlights:

- Difficult for teachers to understand 'What is CLIx?' from 1st session alone. Teachers need more time to process clips.
- Teachers who know Hindi typing (of some kind) ask for rationale of Indic typing demanded by teachers.
- Non-maths teachers can get disengaged in geogebra.
- Teachers ask for subject connections.
- Implementation concerns: student:terminal ratio, period scheduling, lack of previous exposure so need more practice.
- FSPs need more familiarity with tools, design rationale of modules, subject-connections.

3.1. Facilitator's reflections after morning review at Day 2.

- Before discussing how activities are useful, debrief on questions, share learning, (practice too?)
- Connection between subject engagement and online connectivity, to design future online interactions. (?)
- Generating questions amenable to graphs.
- Persistent roadblocks: Network interruptions, loading delays.
- Feedback to be given to i2c team: group activity for Indic typing can create confusion, subject-connections, etc.

3.2. Teacher responses coming from observation checklists

- Technology useful but time-taking to set up and learn; Too much effort.
- Drew geometry diagrams, use spreadsheet as a classroom tracker to create competitiveness in students.
- Chemical bonding videos, diagrams of body-systems,